

Knowledge and Attitude about HIV/AIDS among Pregnant Women of Urban Population of South India

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ABSTRACT:

Background: Acquired Immunodeficiency Disease Syndrome (AIDS) has evolved into a pandemic affecting millions of people worldwide. The global HIV/AIDS epidemic has had a major detrimental impact on maternal and child health throughout the world. More than 95% of 3.2 million infants and young children have acquired the HIV infection by vertical transmission which accounts for vast majority of the infection among the children. Thus, the present study was carried out to assess the extent of awareness and attitude among pregnant women towards HIV/AIDS. **Methods:** A cross-sectional study interviewing pregnant women using pre-designed and pre-tested proforma to assess awareness and attitude towards HIV/AIDS was carried out. Descriptive statistics was applied to assess knowledge as well as attitude and the association between two attributes was calculated by Z proportionate test. **Results and Conclusion:** A total of 271 pregnant women were interviewed. Out of which 43.91% were in 20-24 years age group. 56.46% were housewives and belonged to middle class families. Though the knowledge regarding HIV/AIDS, especially about modes of transmission, symptoms and laboratory diagnosis was found satisfactory but was accompanied by misconceptions. More than 70% were aware about its prevention using condoms and by avoiding multiple sexual partners, however, majority of them lacked the knowledge of risks associated with breastfeeding by HIV positive mothers. Thus, impetus has to be laid upon counseling regarding HIV/AIDS during antenatal period and enlightenment of the women about Integrated Counselling Testing Centres (ICTC) available at the hospitals, so as to heighten the knowledge of facilities for a safer and better pregnancy outcome.

Keywords: Attitude, Awareness, HIV/AIDS, Pregnant Women

INTRODUCTION

AIDS, a disease just 20 years old, has evolved into a pandemic affecting millions of people worldwide. [1] The disease has posed an enormous challenge to the survival of mankind. Since its recognition, the virus has victimized upto 65 million individuals and has claimed 25 million lives because of AIDS.[2] According to WHO/UNAIDS report, about 33.2 million are living with HIV/AIDS, of them 15.4 million are women and 2.5 million are children under the age of 15 years. India's epidemic is marked by heterogeneity-not a single epidemic, but made up of a number of distinct epidemics, in some places within the same state. Based on sentinel surveillance data, Karnataka state has high prevalence of HIV infection (crossed 5% in high risk group and 1% or more in antenatal women) in adult population. [3] India is now encased in type 4 pattern of AIDS epidemic which shifts from high risk group to the bridge population (clients of sex workers, sexually transmitted disease patients) and then to the general population as a whole. [4]

The global HIV/AIDS epidemic has had a major detrimental impact on maternal and child health throughout the world. More than 95% of the 3.2 million infants and young children have acquired the HIV infection from their mothers, usually during the intra-partum period. [5] Vertical transmission of HIV from mother to child accounts for a vast majority of

the infections among the children. Mother to child transmission occurs intrauterine, intra-partum and during breast feeding. Without antiretroviral treatment, the risk of infected women transmitting the virus to her child is between 16 - 40%. Breast feeding contributes to atleast 10% risk of transmission. [6]

Women, especially during their reproductive age are more exposed to the risk of acquiring and transmitting this infection to their fetus. Despite this, many HIV infected women still remain sexually active and thus, imparting awareness about sexuality, contraception, prevention and transmission remains the need of the hour. [7] National Aids Control Organization (NACO) reports that HIV epidemic in India continues to shift towards women with an accompanying increase in horizontal and vertical transmission.

The world AIDS day theme for December 2004 was "WOMEN, GIRLS, HIV AND AIDS" which reflects a focus on how the effects of HIV/AIDS have significantly increased in women. Thus, if women are not targeted for protection from HIV infection it is most likely that a large female population would fall prey to the HIV epidemic in India. [8]

Thus, the present study was undertaken to evaluate the extent of awareness and attitude of the pregnant women towards HIV/AIDS.

METHODOLOGY

A community based cross-sectional study was conducted among pregnant women in urban slums. A house to house survey was carried out in urban slums of Dharwad city, which is the field practice area of urban health centre, Department of Community Medicine, S.D.M. College of Medical Sciences and Hospital, Dharwad, Karnataka, and caters primary health care needs of urban slums and nearby catchment areas. Medical social workers equipped with the proforma enquired the participants. A pilot study conducted for a month to assess the feasibility of using pre-designed proforma when found to be satisfactory, was followed by the present study which was conducted for a period of six months from January to June 2009. The nature of study was explained to the participants who were willing to enroll after signing a written informed consent form. Confidentiality was assured to the participants about their data.

Relevant information was recorded from a total of 271 pregnant women participants in the pre-designed and pre-tested proforma covering socio-demographic characteristics like age, occupation, literacy status, socioeconomic status and knowledge regarding modes of transmission. Misconceptions and attitudes towards HIV/AIDS patients were also noted.

Using descriptive statistics, knowledge as well as attitude was evaluated and the association between two attributes was calculated by Z proportionate test. Statistical significance was set at 5% level of significance ($p < 0.05$).

RESULTS

The age of the participants ranged from 15 to 45 years, with a mean of 24.38 years and a median age of 24.31 years.

Socio-demographic characteristics of pregnant women

Among the 271 pregnant women interviewed a maximum of 119 (43.91%) were in the age group of 20-24 years and minimum of 11 (4.06%) were in the age group of more than 35 years. Majority of the participants 126 (46.49%) had completed primary schooling, while only 13 (4.80%) were graduates. Housewives 153 (56.46%) accounted to major portion of the participant group.

A major chunk of the interviewed population 115 (42.43%) belonged to class III of socioeconomic group. (According to modified B.G. Prasad's Classification). [9] (Table 1)

Knowledge regarding information on HIV/AIDS

Television programs acted as a major source of information about HIV/AIDS to 185 (68.27%)

pregnant women, while 105 (38.75%) of them acquired the same knowledge from daily news paper articles. However, a lesser number of participants 48 (17.71%) did receive these information during their school days probably through health education programs imparted in the school by their teachers and health care providers.

The knowledge regarding modes of transmission, symptoms and diagnostic tests was also quite satisfactory. (Table 2)

Life expectancy of HIV/AIDS patients was assumed to be about 10 years according to 61 (22.51%) of the participants.

Knowledge regarding prevention on HIV/AIDS

214 (78.97%) pregnant women were aware of preventive practices viz...use of condoms, avoiding multiple sex partners, avoiding use of unsterilized needles and by avoiding breast feed to the child. (Table 3)

Attitude towards HIV/AIDS patients

The attitude of the participants towards HIV/AIDS patients was marred with false beliefs and misconceptions. Also, the participants were unaware of the consequences of breast feeding by a HIV positive mother. (Table 4)

Comparison of literacy status with modes of transmission

Over all, the literate participants of this study were found to be better of compared to their illiterate counterparts regarding the knowledge about consequences of breast feeding by a HIV infected mother, risk of HIV transmission by sexual contact, blood transfusion, vertical route and sharing needles among IV drug abusers. ($p < 0.001$). (Table 5)

Misconceptions of vaccine for prevention and spread of the infection by kissing and mosquito bites were also prevalent in the study group.

DISCUSSION

The present study was aimed at assessing the knowledge as well as attitude of pregnant women towards HIV/AIDS with an attempt to create awareness about HIV/AIDS and also about ICTC available at various hospitals through health education programme.

The present study highlights that though the study population consisting mainly of house wives with only a meager educational qualification and exposure, their knowledge regarding the disease, its modes of transmission, prevention and treatment were quite satisfactory.

Urban population of socioeconomic class III and IV which formed the a large portion in this study group, have been found to be knowledgeable regarding HIV/AIDS according to earlier studies also, as in a study conducted by Singh S et al. in an urban population of New Delhi. [10]

Table 1. Socio-demographic characteristics of pregnant women

Age (years)	Number	Percentage (%)
15-19	33	12.18
20-24	119	43.91
25-29	87	32.10
30-34	21	7.75
≥ 35	11	4.06
Educational status	Number	Percentage (%)
Illiterates	39	14.39
Primary (upto 7)	126	46.49
High School (8-10)	75	27.68
Intermediate (11-12)	18	6.64
Graduate/Above	13	4.80
Occupation	Number	Percentage (%)
House wife	153	56.46
Private Service	49	18.08
Government service	08	2.95
Labourers/Agriculturists	61	22.51
Socioeconomic class (in rupees)	Number	Percentage (%)
Class I (> 2500)	13	4.80
Class II (1250-2475)	27	9.96
Class III (750-1225)	115	42.43
Class IV (375-725)	85	31.37
Class V (< 375)	31	11.44

Participants (n=271)

Table 2. Knowledge regarding information on HIV/AIDS*

Source of information	Number	Percentage (%)
Television	185	68.27
Schools/colleges	48	17.71
Paper	105	38.75
Advertisements	69	25.46
Others (family members, friends, healthcare providers)	41	15.13
Modes of transmission	Number	Percentage (%)
Breast feeding by HIV positive mothers	121	44.65
IV drug abusers / those sharing needles	135	49.82
Mother to child	166	61.25
Blood transfusion	209	77.12
Sexual contact	234	86.35
Symptoms	Number	Percentage (%)
Loss of weight	196	72.32
Prolonged fever	142	52.40
Continuous diarrhoea	70	25.83
Others (cough, vomiting, pain abdomen)	18	6.64
Laboratory diagnosis	Number	Percentage (%)
Blood examination	243	89.67
Urine examination	22	8.12
Stool examination	15	5.54
Sputum examination	26	9.59

Participants (n=271) * Multiple answers

Table 3. Knowledge regarding prevention on HIV/AIDS

Prevention	Number (n=271)	Percentage (%)
Can be prevented	214	78.97
Cannot be prevented	45	16.60
Don't know	12	4.43
Methods of prevention *	Number (n=214)	Percentage (%)
Avoid sharing needles among IV drug abusers	51	23.83
Avoid breast feeding	93	43.46
Avoid unsterilized needles	123	57.48
Avoid multiple sex partner	154	71.96
Using condoms	167	78.04

*** Multiple answers**

Table 4. Attitude towards HIV/AIDS patients

Should marry	Number	Percentage (%)
Yes	37	13.65
No	193	71.22
Don't know	41	15.13
Should conceive	Number	Percentage (%)
Yes	17	6.27
No	169	62.36
Don't know	85	31.37
Should breast feed	Number	Percentage (%)
Yes	28	10.33
No	112	41.33
Don't know	131	48.34

Participants (n=271)

Table5. Comparison of literacy status with modes of transmission

Literacy Status (n=271)	Breast feeding by HIV positive mothers (n=121)	IV drug abusers / sharing needles (n=135)	Mother to child (n=166)	Blood transfusion (n=209)	Sexual contact (n=234)
Illiterates (n=39)	06 (4.96%) #	11 (8.15%) #	13 (7.83%) #	19 (9.09%) #	23 (9.83%) #
Literates (n=232)	115 (95.04%) #	124 (91.85%) #	153 (92.17%) #	190 (90.91%) #	211 (90.17%) #
Z value	- 7.3617*	- 7.4571*	- 8.3069*	- 9.1550*	- 9.5805*
P value	p < 0.001	p < 0.001	p < 0.001	p < 0.001	p < 0.001

p < 0.001, Highly Significant.

*** Z Proportionate Test.**

Participants responding in positive for questions regarding the particular mode of transmission.

This wide spread flow of knowledge has been through the various channels of the media. As proved from earlier studies [11], television serves as a major source of information which is accessible to the population of lower economic strata also. Thus, strengthening this tool would help clarify the wrong beliefs accompanying the disease.

The knowledge about diagnosis by blood examination and prevention of the disease by using condoms was more in this study group compared to a study conducted by Sarkar S et al. among married women of reproductive age group attending teaching hospital [1],

owing to more literate participants in this study. Hence, primary schooling also can have a beneficial impact on improving knowledge regarding various aspects of HIV/AIDS.

Negative attitudes and false beliefs observed in the present study were similar to those surveyed by Ananth P et al. among women of child bearing age in four major cities in India. [12]

CONCLUSION

Even though majority of the participants were educated only upto the primary schooling, their knowledge about acquiring and transmitting HIV/AIDS was found to be satisfactory but it was accompanied by some misconceptions, it is thus imperative to dispel the myths and wrong notions about HIV/AIDS from minds and replace it with correct knowledge. As this study highlights the importance of media in dissemination of information about the disease, this tool can be best utilized to clarify the misconceptions accompanying the disease.

Since, a small % of the women did acquire the knowledge about HIV/AIDS from their schools; it would be prudent to motivate the pregnant women to educate their girl children in schools for transferring information about such dreaded diseases which is otherwise difficult for the girl child to acquire. To achieve this, there is need to educate the pregnant women, family members and teachers in the community.

Awareness about the prevention of HIV/AIDS was adequate but can further be enriched by continuous health education to develop positive attitude and healthy practices. There is a further need to improvise on the utilization of ICTC services for the betterment of the community. Biologically, women have been found to be at a higher risk of developing the HIV infection if exposed to an HIV infected partner, it is obviously better to equip and enlighten the women to protect themselves from contracting the infection so as to guard the community from further propagation of this pandemic.

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